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Embedding SMEs in Supply Chains to Enhance Their Survival: A Comprehensive Exploration

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Abstract— *Purpose – Small and medium-sized enterprises (SMEs) play a pivotal role in the global economy, contributing significantly to innovation, employment, and economic growth. However, their survival rate remains low motivating the need to find practical ways to enhance their survival. SME integration into global supply chains enhances their survival and success. Yet, embedding in supply chains remains a challenge for SMEs. This article examines the integration of SMEs within supply chains, emphasizing the opportunities that support their sustainability and expansion. It also enhances the understanding of the significance and impact of embedding SMEs in supply chains as a strategy for improving their long-term viability. Adopting a humanist paradigm with an interpretivist epistemological stance, a qualitative and phenomenological approach, this empirical study investigates the perspectives and experiences of supply chain professionals, SME managers and owners, and incubators actively engaged in the SME sector, gathering data on their insights and real-world experiences. regarding the phenomenon of the value of embedding SMEs in supply chains. The study utilised purposive sampling to achieve data saturation through semi-structured interviews with a total of 30 participants in Botswana. The findings were analysed using a thematic approach. The results obtained show that embedding SMEs in supply chains significantly enhances their survival by fostering resilience, innovation, and market competitiveness. They also reveal that embedding in supply chains allows SMEs to leverage strategic intelligence, collaborate with partners, and adopt sustainable practices, ultimately positioning them to navigate challenges effectively enhancing their survivability. Notwithstanding these life-saving benefits, the results also indicate that embedding in supply chains is slow and not prioritised among SMEs. These insights offer academics and practitioners a more comprehensive understanding of the significance of integrating SMEs into supply chains as a survival practice and suggest that SMEs should prioritise and increase the pace of embedding in SMEs. Notwithstanding the opportunities for deeper insights into the lived experiences of participants, potentially revealing nuanced understandings of their contexts, the research's limitations include potential biases from interviewee perspectives, reliance on subjective interpretations, and the challenge of generalizing findings beyond the specific context of Botswana's SMEs. This calls for future studies to collect data from various socio-economic contexts using different data collection methods for comprehensive discussion regarding the importance of embedding SMEs in supply chains. The paper presents the value of SMEs in supply chains as an approach that significantly enhances SME survival providing a conceptual model that can be useful in understanding the phenomenon of embedding in supply chains.*

Keywords— ***Embedding, SMEs, Supply Chain, Survivability***

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I. INTRODUCTION

Small and medium-sized enterprises (SMEs) are widely recognized for their essential contribution to the global economy. They play a crucial role in fostering innovation, generating employment opportunities, creating value, and driving economic growth (Enaifoghe, 2024; Qobuljon, 2024). SMEs contribute to economic growth by enhancing competitiveness, creating jobs, generating tax revenue, and fostering innovation (Yelshibayev & Tungatarova, 2024). In addition, SMEs foster equitable development (Nor, 2024), support industrialization, and contribute to the equitable distribution of national income and wealth, making them vital for sustainable economic progress (Babitha & Murthy, 2024). They also enhance competition, attract foreign investments, and promote a stable socio-economic environment, ultimately accounting for about 90% of world production and 55% of GDP (Alekseievska, 2023; Ekonomika, 2022). SMEs enhance export diversity (Qobuljon, 2024) and reduce poverty (Abdul-Azeez et al., 2024; Nor, 2024).

Notwithstanding their significant contribution to national and global economies, SMEs are notoriously known for their low mortality or survival rates. In Nigeria, this failure rate is as high as between 80-85% within the first five years (Ade et al., 2020). Approximately 60% of SMEs in Malaysia fail within the first three years, while in the UK, 35% fail after three years and 55% after five years (Ma'aji et al., 2023). These low survival rates are attributed to many interrelated factors, particularly in emerging markets. These factors include inadequate entrepreneurial competencies especially in financial management (Hai et al., 2023), limited access to finance and other resources, lack of market knowledge, intense market competition from globalisation (Kwan & Watt, 2024; Mardikaningsih et al., 2022; Gamage et al., 2019), external economic challenges such as pandemics, trade wars and terrorism (Gamage et al., 2019), rapid technological changes, high tax burdens, negative perceptions from customers (Tong et al., 2019), crises (Hai et al., 2023) and poor risk management practices (Ade et al., 2020). Having a clear understanding of these challenges is important for developing strategies that enhance SME survival.

In today's interconnected economy, SME survival and success often hinge on their ability to integrate into global supply chains (Bazile & Su, 2024; Kang & Kim, 2023; Nugroho, 2022). Embedding SMEs into supply chains can enhance their resilience, open new market opportunities, and provide access to knowledge and resources that might otherwise be out of their reach. SME participation in global supply chain networks can unlock numerous opportunities for growth, innovation, and competitiveness. Participation of SMEs in global value chains (GVCs) is crucial for their internationalization as it enhances export (Nugroho, 2022; Arudchelvan & Wignaraja, 2015). SMEs can enhance their survival and success by leveraging strategic networks within global value chains, fostering long-term relationships with lead firms, and overcoming barriers to upgrading through collaborative partnerships and management capabilities (Kang & Kim, 2023). Effective supply chain integration enhances SME performance through improving efficiency, optimizing inventory management, and increasing market competitiveness (Rahman & Rahim, 2024). These benefits can be better understood from the lived experiences of those involved in the SME and supply chain practices.

Building on the above and grounded in network theory, this research aims to explore the following primary research question (RQ):

RQ1. How does embedding in supply chains enhance SME survival?

To respond to this primary question, two sub-research questions (SRQs) are examined:

SRQ1. Do SMEs and incubators priotise embedding in supply chains?

SRQ2. How early on do SMEs embed in supply chains when compared to LEs?

Drawing from the primary research question and its associated sub-research questions, this study explores how SMEs enhance their survival by embedding in supply chains. To respond to the above research question and achieve its aim, this study specifically gathers insights from SME owners and managers, supply chain experts, and incubators on the benefits that SMEs can reap by embedding in supply chains which enhance their survivability. This exploration is crucial as SMEs tend to be slower than larger enterprises (LEs) in embedding in supply chains which significantly impacts their survival and growth.

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This study significantly contributes to practice and existing literature on SME survival. The contributions of this study to practice include providing SMEs with insights on leveraging supply chains for their survival and growth. The findings inform SME policy makers about the value of embedding SMEs in supply chains for SME longevity. The study provides guidance to incubators on the significance of prioritizing mentorship and training in SME supply chain integration to strengthen SMEs both during and after the incubation period.

Given the paucity of comprehensive literature on how SMEs can enhance their survival by embedding in supply chains, this research fills that knowledge gap by providing empirical evidence on the specific benefits that embedding in supply chains brings SMEs which enhances their survival. The research also expands and strengthens the understanding of the network theory in relation to SME survival resulting from their embedding in supply chain networks.

II. LITERATURE REVIEW

2.1 Embedding SMEs in supply chains: the concept

Embedding SMEs in supply chains refers to integrating SMEs into broader and larger supply networks, enabling them to collaborate effectively with other firms in the network (Palomero & Chalmeta, 2014). This process is crucial for SMEs to have easy access to new markets, enhance competitiveness, and leverage knowledge and resources from other entities, align their processes with those of partners, and improve overall efficiency. Embedding in supply chains enables SMEs to overcome various challenges and capitalize on opportunities to ensure sustainable growth, resilience and survival.

The following section explores the current state of affairs with regards to SME integration speed in supply chains compared to large enterprises (LEs).

2.2 Embedding in supply chains: lagging behind Large Enterprises (LEs)

While embedding in supply chains is a competitive business approach for enterprises of all kinds, and largely adopted by large enterprises (LE) it is not speedily adopted by SMEs (Aem-on et al., 2024; Rahman & Rahim, 2024; Sadeghi & Hasan, 2024; Talib et al., 2023; Palomero & Chalmeta, 2014; Chen et al., 2004) as it is by LEs. SMEs are slow in adopting supply chain integration compared to larger enterprises (Aem-on et al., 2024; Logožar, 2013; Chen et al., 2004) and they continue to face challenges in adopting supply chain integration compared to larger enterprises (Rahman & Rahim, 2024; Sadeghi & Hasan, 2024).

The SME lag in embedding in supply chains is attributed to high costs, technology requirements, and a lack of bargaining power (Aem-on et al., 2024; Rahman & Rahim, 2024; Sadeghi & Hasan, 2024; Morrell & Ezingeard, 2002; Logožar, 2013). SMEs often perceive suppliers merely as processes rather than partners, leading to less focus on integration with them (Logožar, 2013). LEs typically have more capital to invest in supply chain technologies, allowing them to integrate their supply chains more effectively and efficiently. SMEs, on the other hand, must navigate these complexities with limited resources, which can hinder their ability to fully integrate supply chain processes.

Despite these challenges, SMEs can benefit significantly from supply chain integration, improving efficiency, inventory management, and customer service, thereby enhancing competitiveness. The participation of SMEs in global value chains (GVCs) enhances SME exports and hence is crucial for their internationalization (Nugroho, 2022).

The following section provides the network theory as the logical explanation behind embedding in supply chains. The theory provides explanation, understanding and meaningfulness to this research study.

2.3 Network Theory

The network theory emphasizes relationships and inter-firm collaborations (Bazile & Su, 2024; Cozzolino et al., 2023; Yang & Ren, 2021). When SMEs are embedded in supply chains, they tend to enjoy many benefits including access to resources (Yang & Ren, 2021), access to markets, collaborations and partnerships that enhance resilience, shared risks and collective bargaining power. When they embed in supply chains SMEs gain legitimacy and reduce market uncertainties, which improves their chances of survival.

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By leveraging network relationships, SMEs can better navigate systemic risks and uncertainties, thereby improving their chances of survival and growth. This is especially advantageous within global supply chains, where SMEs frequently encounter obstacles due to limited resources and exposure to external shocks. Network relationships positively influence SMEs' innovation performance by facilitating knowledge sharing and dynamic capabilities (Yang & Ren, 2021).

The dynamic capabilities developed through network relationships enable SMEs to adapt effectively and efficiently to shifts in the supply chain environment, thus enhancing their innovation potential (Yang & Ren, 2021). Network collaborations, particularly in supply chain finance, allow SMEs to reorganize relationship interfaces and improve competitiveness. This collaboration can lead to better financial management and resource allocation, crucial for SME survival (Cozzolino et al., 2023). Embedding in supply chains improves supply network visibility and environmental sensing, which empowers SMEs to make informed decisions and commit resources effectively, reducing uncertainty and enhancing resilience (Bazile & Su, 2024).

The following section summarizes and synthesizes the arguments and ideas of existing knowledge on the benefits for SMEs when they embed in supply chains. It gives a summary of the key benefits. The twin goals of the section are to identify a problem and develop a theory.

2.4. The business case for SMEs embedding in supply chains

Embedding SMEs in supply chains enhances their survival by providing access to larger markets, fostering technological advancements, promoting sustainability initiatives, and facilitating collaborative networks (Takawira, 2024). These factors help SMEs navigate challenges and leverage opportunities for growth.

In addition, embedding SMEs in supply chains enhances their survival by fostering strategic intelligence (Sadeghi & Hasan, 2024), which encompasses visibility within the supply network, environmental awareness, and prompt responsiveness (Bazile & Su, 2024). SMEs can easily navigate risks, reduce uncertainty, and commit resources effectively during crises when they are part of wider network.

Embedding SMEs in supply chains also enhances their survival by fostering collaboration, communication, and flexibility (Aem-on, et al., 2024). This integration allows SMEs to adapt quickly to crises, leverage diverse resources, and maintain cash flow, ultimately strengthening their supply chain resilience and operational performance ensuring survival.

Furthermore, embedding in supply chains fosters collaboration which allows SMEs to optimize resources, reduce costs, and expand market reach (Oyeyemi et al., 2023). Through partnerships with larger distributors or retailers, SMEs can gain access to expanded distribution networks and reach new customer groups (Oyeyemi et al., 2023). Collaboration also fosters innovation, enabling SMEs to co-develop products and share technological advancements, which is crucial for maintaining competitiveness (Oyeyemi et al., 2023). By embedding in supply chains SMEs can enhance their operational efficiencies, innovation, market expansion, and risk management (Oyeyemi et al., 2023).

Embedding SMEs in supply chains also enhances their survival by fostering strong partnerships through contractual and relational investments, which improve resilience (Trunk & Birkel, 2022). These relationships enable better anticipation and coping during crises, ultimately supporting SMEs in navigating challenges

Additionally, embedding SMEs in supply chains enhances their survival by adopting strategies like collaboration and multi-sourcing, which build flexibility and mitigate risks during disruptions (Gurbuz et al., 2022). This approach allows SMEs to compete effectively against larger firms by preserving demand and maintaining profits.

Embedding SMEs in supply chains also enhances their survival by fostering trust-based relationships, enabling collaborative opportunities, and improving operational performance (Jones et al., 2014). Trust reduces costs and facilitates access to resources, ultimately leading to competitive advantages and better positioning within the supply chain.

Furthermore, embedding SMEs in supply chains enhances their survival by providing access to impact investing, which addresses financing gaps (Ferretti,

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2023). This support enables SMEs to adopt sustainability strategies, crucial for their resilience and contribution to global value chain sustainability.

Embedding SMEs in global value chains enhances their survival by providing stability, increasing productivity, and fostering cooperation with partners (Industry, 2005). This collaboration improves information flows and learning opportunities, although it also demands greater managerial and financial resources from these enterprises.

Embedding SMEs in supply chains can also enhance their survival by providing strategic advantages and fostering external relationships (Macpherson & Wilson, 2003). The research indicates that with appropriate support, SMEs can leverage supply chains for development opportunities, aligning with their preferred learning styles. Embedding SMEs in supply chains can enhance their survival by leveraging process and product innovations, especially under varying environmental uncertainties (Kim et al., 2023).

Embedding SMEs in supply chains enhances their survival by providing access to new markets, knowledge spillovers, and trade finance (OECD, 2023). This integration fosters resilience against disruptions, such as pandemics and natural disasters, while promoting sustainable and responsible business practices

Being part of a supply chain significantly enhances SMEs' survival by reducing entry costs and providing economies of scale, increasing their likelihood of exporting (Giovannetti et al., 2014). Downstream producers particularly benefit, as evidenced by the positive impact on trade probability.

Embedding SMEs in supply chains also enhances their survival by increasing innovativeness and performance, facilitating access to markets, and improving financial stability (Popović-Pantić et al., 2020). This integration allows SMEs to leverage larger corporations' resources, ultimately contributing to economic growth.

Embedding SMEs in supply chains enhances their survival by fostering collaboration, trust, and information sharing, which are crucial for meeting global supply chain challenges (Stonkutė & Vveinhardt, 2016). This integration allows SMEs to leverage their proximity to customers and improve operational performance.

Embedding SMEs in supply chains enhances their survival by fostering strong collaboration, addressing internal risks, and leveraging a holistic framework of enablers and barriers (Ali et al., 2017). This interconnectedness is crucial for building resilience.

In addition, embedding SMEs in supply chains enhances their survival by fostering collaboration, information sharing, and flexibility (Abun, 2022). This interconnectedness allows SMEs to mitigate risks, adapt to disruptions, and leverage multiple suppliers, ultimately contributing to their resilience during challenging times like COVID-19

Embedding SMEs in supply chains enhances their survival by fostering innovation, improving visibility, and ensuring transparency (Ramakrishna, 2021). This integration allows SMEs to adopt affordable digital technologies, ultimately leading to more robust operations and better resilience against disruptions.

Additionally, embedding SMEs in resilient supply chains enhances their survival by improving agility, flexibility, and robustness, which positively impacts their production and marketing/sales performance, ultimately enabling them to better tackle uncertainties in business operations (Alshahrani & Salam, 2022).

Embedding SMEs in supply chains enhances survival by enabling strategic choices based on situational control. High control leads to buffering strategies, while low control necessitates bridging strategies, allowing SMEs to adapt during global disruptions effectively (Hassan et al., 2024).

Embedding SMEs in supply chains enhances their survival by improving responsiveness to market changes, fostering innovation, and enabling access to resources. This integration allows SMEs to adapt quickly, meet consumer demands, and strengthen their competitive position in volatile environments (Verma et al., 2022).

Embedding SMEs in supply chains enhances their survival by fostering collaboration, improving resource utilization, and increasing transparency. This integration allows SMEs to align with consumer demand for sustainable practices, ultimately building trust, brand loyalty, and competitive advantage in the market (Oyeyemi et al., 2024).

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Embedding SMEs in supply chains enhances their visibility, transparency, and robustness, enabling them to adapt to disruptions (Wright, 2022). This integration fosters innovation and resilience, crucial for their survival and revival in challenging economic conditions.

Embedding SMEs in supply chains enhances their resilience and adaptability, enabling them to mitigate risks and leverage digital technologies (Ugrinov et al., 2024). This integration fosters innovation and sustainability, ultimately improving operational efficiency and competitiveness, crucial for survival in a complex business environment.

Embedding SMEs in supply chains enhances their survival by improving operational efficiency, fostering collaboration, and increasing market access. Embedding in supply chains allows SMEs to streamline processes, reduce costs (Rahman & Rahim, 2024) and respond swiftly to market demands. By leveraging partnerships within the supply chain, SMEs can share resources, knowledge, and technology, which helps them overcome challenges unique to their size, ensuring their sustainability and growth (Talib et al., 2023).

III. RESEARCH METHODS

3.1 Research approach and design

This study employed a qualitative approach with a phenomenogical design which are particularly suitable and effective for exploring of SME supply chain integration phenomenon and gaining in-depth insights into participants' experiences and perspectives (Oranga & Matere, 2023).

3.2 Participant Selection and sample size

This study used purposive sampling to select participants. This method involves selecting participants who are most likely to provide relevant and rich data (Kaur et al., 2023; Pombo & Franco, 2023). In this case, SME owners, managers, incubators, and supply chain experts are chosen for their expertise and experience in the field to ensure a diverse range of experiences (O'Neill et al., 2023).

For its sample size, this study comprised a total of 30 participants. A total of 30 participants is considered adequate for achieving data saturation in qualitative research, allowing for diverse perspectives while maintaining manageability (Tsang, 2023).

3.3 Interview design and Data Collection

In this study, data were collected through semi-structured interviews. These interviews combined predetermined questions with the flexibility to explore topics in greater depth, allowing for participant-driven insights (Maher & Bedwei-Majdoub, 2024). This method provides flexibility in exploring various topics while ensuring a consistent structure throughout the interviews. It enables the researcher to probe deeper into specific areas of interest as they arise during the conversation (Pombo & Franco, 2023). An interview guide or script was developed to ensure that all relevant topics are covered, while also allowing for spontaneous discussion (Pombo & Franco, 2023).

3.4 Data Analysis and software

Thematic analysis was used in this study. It involved transcribing interviews, reflexive or independent coding the data to ensure reliability (O'Neill et al., 2023) and using a hybrid approach which combined inductive and deductive methods to identify recurring key themes (O'Neill et al., 2023; Gabriel et al., 2024) from the data that reflect participants' perceptions and experiences (Gu et al., 2024; O'Neill et al., 2023) and interpreting and reporting patterns on the benefits that SMEs reap from embedding in supply chains subsequently leading their survival. The Atlas.ti software was employed to assist in organizing and coding data, enhancing the rigor and efficiency of the analysis process (Pombo & Franco, 2023).

3.5 Reflexivity

To enhance trustworthiness and credibility, the researcher practiced reflexivity at all stages of the research, that is, the researcher remained aware of their biases and the impact of their interpretations on the findings (Gu et al., 2024; Olmos-Vega, et al., 2022). Participants checked and verified their transcripts to improve quality and credibility of collected data. Peer debriefing involved sharing the results with other researchers for their views and validation.

3.6 Justification of Methods

The methods outlined above were chosen for their relevance to the research question and objectives.

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Their use is justified by their capacity to offer profound insights into the research questions, especially in exploring how integration into supply chains supports the survival and growth of SMEs (Kaur et al., 2023). The methods were also used for their flexibility and depth. Semi-structured interviews and thematic analysis offer the flexibility needed to explore complex issues while providing a structured approach to data analysis (Lopes, 2024).

IV. FINDINGS AND DISCUSSION

The study aimed to address one primary research question and two sub-research questions, as outlined below:

RQ1. How does embedding in supply chains enhance SME survival?

SRQ1. Do SMEs and incubators priotise embedding in supply chains?

SRQ2. How early on do SMEs embed in supply chains when compared to LEs?

4.1 General statement of the findings

The primary data obtained in the is study were subjected to thematic analysis to identify recurring themes or patterns. Regarding the main research question, the respondents revealed seven benefits for SMEs of embedding in supply chains that enhance the survival of SMEs. Regarding sub-research questions 1 and 2 regarding prioritisation and speed of embedding SMEs in supply chains the findings revealed that embedding in supply chains in not a priority for incubator training and mentorship programmes and for SMEs themselves. Embedding in supply chains was also found to be very slow. The next section outlines the nine themes that emerged from the coded transcripts as evidence. A discussion of each theme is juxtaposed to the theme.

4.2 Main findings and discussion

Theme 1: SME supply chain integration is not prioritised

Across the all the three participant constituencies [SME owners and managers, supply chain experts, and incubators], many respondents expressed that embedding SMEs in supply chains is not a prioritised.

> *"While we know the importance of embedding SMEs in supply chains, and somehow do promote it through networking events, we do not have it specifically emphasised as a top priority on our incubation programmes."* [Respondent 1]

This finding aligns with previous studies that suggest SMEs do not proactively prioritise embedding in supply chain networks earlier on which contrasts with LEs (Aem-on et al., 2024; Rahman & Rahim, 2024; Sadeghi & Hasan, 2024). Failure to prioritise embedding in supply chains as early as possible deprive SMEs of potential benefits that could enhance their survival than if they prioritised embedding in supply chains from the get-go. Incubators can enhance SME survival through prioritising supply chain integration in their training and mentoring programmes.

Theme 2: SME embedding in supply chains in slow

Many respondents highlighted that the speed at which SMEs embed in supply chains is slow due the challenges they encounter in their formative years. Many emphasised that lack of resources and not being well-known drag slow their supply chain integration speed.

> *"We are quite slow in our supply chain integration because we are new in markets without any experience and with little resources to network on a larger scale."* [Respondent 7]

The responses support the observation that SMEs do not embed in supply chains as quickly as LEs (Aem-on et al., 2024; Logožar, 2013). SMEs that speedily and actively engage in supply chain collaboration tend to achieve higher operational efficiency and improved product development leading to their survival and growth.

Theme 3: Embedding in supply chains enhances market access and expansion

Many participants highlighted that embedding SMEs in supply chains provided opportunities for market expansion. Several respondents emphasized the role of supply chain partnerships in accessing broader distribution channels.

> *"Being part of a larger supply chain helped us reach new customers that we previously couldn't access. The exposure*

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has been invaluable for our business growth." [Respondent 3]

This finding aligns with previous studies that suggest SMEs benefit from supply chain networks by entering previously inaccessible markets (Takawira, 2024). Market access not only increases sales but also enhances competitiveness (Verma et al., 2022).

Theme 4: Embedding in supply chains fosters collaboration and partnership

Participants consistently discussed how embedding in supply chains fosters collaborations with other supply chain members which led to process improvements and innovation. This was particularly evident in cases where SMEs partnered with larger firms or engaged in knowledge-sharing practices.

"*Through our supply chain partnerships, we've been able to co-develop products with larger firms. This has helped us innovate and stay competitive in the market.*" [Respondent 11]

The responses support the argument that collaboration facilitates knowledge transfer, ultimately improving SMEs' innovation capabilities (Oyeyemi et al., 2023). SMEs that actively engage in supply chain collaboration tend to achieve higher operational efficiency and improved product development which subsequently lead to their survival and growth.

Theme 5: Embedding in supply chains offers access to technologies and innovation

Participants consistently stated that being part of a larger supply chain network improved enhanced their collaboration and enabled partnerships which facilitated them to have access to advanced technologies that they themselves did not have which led to faster and cheaper production.

"*Collaborating with our supply chain partners, we were able to use their advanced technologies which we couldn't afford by ourselves. This helped us cheaply and quickly produce our products as much as it helped us quickly get knowledge on how to use those technologies.*" [Participant 18]

This aligns with the view that embedding in supply chains increases access to partners' advanced technologies which enhances operational efficiency and resilience (Ramakrishna, 2021) and improves competitiveness and adaptability (Ugrinov et al., 2024). Knowledge diffusion among network members drives and enables innovation and improvements which lead to improved competitiveness and efficiency thus enhancing growth and survival of SMEs.

Theme 6: Embedding in supply chains enables risk management and resilience

Participants noted that being part of an established supply chain network helped mitigate risks and improve resilience, especially in crises like COVID-19 pandemic.

"*When the pandemic disrupted supply chains, our ability to adapt quickly was largely due to our existing partnerships. We shared resources and strategies, which helped us survive.*" [Participant 25]

This aligns with the concept of supply network visibility and environmental sensing as key strategies for reducing uncertainty and ensuring business continuity (Sadeghi & Hasan, 2024). Embedding SMEs in supply chains provides a crucial buffer against external shocks (Hassan et al., 2024).

Theme 7: Embedding in supply chains leads to financial stability and access to investment

Access to financial support through supply chain integration was another significant theme. Participants highlighted how being embedded in supply networks increased their ability to secure financing and investment.

"*Before joining a structured supply chain, securing funding was a challenge. Now, financial institutions see us as more stable, and we've had better access to trade finance.*" (Respondent 29)

These findings support previous research indicating that embedding in supply chains fosters financial stability by leveraging larger firms' resources (Popović-Pantić et al., 2020) and that strong partnerships ensure steady cash flow and economic growth (Talib et al., 2023). It also aligns with the observation that financial institutions are more likely to fund SMEs that demonstrate stability through

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supply chain integration (Ferretti, 2023). This suggests that supply chain participation not only enhances market access but also strengthens SMEs' financial sustainability which is crucial for their survival.

Theme 8: Embedding in supply chains enhances operational efficiency and performance

Participants highlighted that embedding in supply chains enabled them to improve their processes and significantly reduce operational costs giving them better performance.

> "*Being part of a structured supply chain has enabled us to streamline our processes and reduce costs significantly. We now know what is happening in our supply chain at any moment. Collaboration has optimized our resource use, minimized waste, and helped us respond better to customer demands.*" (Respondent 5)

The findings corroborate that SMEs benefit from supply chain integration by streamlining processes and reducing costs (Rahman & Rahim, 2024) and optimized resource utilization and reduced waste (Oyeyemi et al., 2024). Operational efficiencies and improvements allow SMEs to improve their profitability and competitiveness which subsequently leads to their growth and survival.

Theme 9: Embedding in supply chains fosters adoption of sustainability and ethical practices

Participants highlighted that embedding in supply chains enabled to adopt best sustainability and ethical practices earlier on through shared experiences with more experienced partners in their supply chain network. This improved their compliance and enhanced their brand image.

> "*Integrating into the supply chain exposed us to the sustainability and ethical standards followed by our larger, more experienced network partners. Learning from them helped us adopt better practices, ensuring compliance and improving our brand image in the market.*" [Respondent 23]

This finding aligns with the view that embedding in supply chains enables SMEs to get exposed to sustainability initiatives (Takawira, 2024) which enables the SMEs to quickly learn and adopt better sustainable and ethical practices from their tried and tested supply chain partners. This not only helps SMEs to become compliant but also improve their reputation enabling them to become better recognised and favourable to market stakeholders which enhance their survival.

The qualitative findings suggest that embedding in supply chains is not prioritised by SMEs themselves as well as those incubating them. The findings also reveal that the speed of embedding in supply chains is slow among SMEs when compared to LEs. The findings further suggest that embedding SMEs in supply chains significantly contributes to their improved access to markets and expansion, collaboration and partnership, access to innovation and advanced technologies, better risk mitigation and resilience, financial stability, faster adoption of sustainability and ethical practices, and improved operational efficiency and performance. The respondents' narratives illustrate the tangible benefits of supply chain integration, reinforcing previous literature on SME survival, resilience and growth.

V. CONCLUSIONS AND IMPLICATIONS

5.1 Conclusions

Derived from on network theory this study explored the benefits for SMEs embedding in supply chains. Using a qualitative research approach and a phenomenological design the results reveal that when SMEs embed in supply chains their chances of survival are enhanced. By leveraging supply chain networking SMEs can overcome the many life-threatening challenges they face in their early years when they are still vulnerable through benefiting from the many opportunities that emerge from their embedding in supply chain networks. Like LEs, SMEs must prioritise and increase the speed of embedding in their supply chains if they are to improve their survivability.

5.2 Theoretical implications

Firstly, this study is the first to offer a detailed and nuanced understanding of how integration into supply chains improves SME survival based on lived experiences and perspectives of the SME owners and managers, supply chain experts and SME incubators. This research adds to existing SME and supply chain integration literature by empirically exploring the benefits SMEs reap when they embed in supply chains

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which enhances their survival. Compared with other relevant studies on the same phenomena this research offers evidence and a more unique theoretical understanding of the significance of SMEs embedding in supply chains as a novel approach to enhancing SME survival.

Secondly, this study offers valuable insights into the connection between integration into supply chains and survival thus, reinforcing the argument for prioritizing the swift integration of SMEs into supply chains as a strategic approach to overcome the many challenges SMEs face in their early years with a view to improve their survivability.

Thirdly, this study broadens the application of network theory by exploring the role embedding SMEs in supply chains plays in enhancing SME survival. This study enriches and galvanises the significance of networking for SMEs.

5.3 Managerial, policy and incubation implications

First, to enhance their survival and growth SMEs should proactively and quickly embed in supply chains to reap the life enhancing opportunities prevalent in supply chain networks as a top priority. There is a clear need for SMEs to integrate in supply chains to survive and grow.

Second, to promote SME survival and growth, SME policy should prioritise embedding SMEs in supply chain as a strategic practice to enhancing SME survival and growth.

Third, SME incubators must embed supply chain integration, as a top intervention priority, in their SME incubatee training and mentorship programmes to enhance SME survivability during and post incubation.

5.4 Limitations and future research directions

5.4.1 limitations

This study has the potential limitations of subjectivity and bias. Since phenomenological research relies on participants' lived experiences, responses may be influenced by personal perceptions, biases, and emotions. The interpretative nature of the analysis may introduce researcher bias despite efforts to maintain objectivity.

The study also has a limited generalizability. The study concentrates on SMEs in Botswana, and its findings may not be applicable to SMEs in other geographical or economic settings. The specific challenges faced by SMEs in Botswana may differ from those in other regions.

5.4.2 Future research directions

Given the limitations outlined above, the following directions for future research are proposed:

Future studies can integrate quantitative approaches, such as surveys or statistical modelling, to validate and complement qualitative findings, enhancing the robustness and generalizability of the research.

Future research can be a comparative regional study. Expanding research to compare SMEs in Botswana with those in other African countries or global markets can provide insights into best practices and policy recommendations for SME supply chain integration.

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